THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XXXI. WEDNESDAY, NOVEMBER 13, 1844. No. 15.

REMARKS ON TUMORS, WITH CASES.

By Professor Amasa Trowbridge.

[Communicated for the Boston Medical and Surgical Journal.]

I COMMUNICATE the history and treatment of a few cases of tumors, which may be considered interesting from their peculiar location, rather than from any other circumstance.

There are but few subjects in surgery, on which the accumulation of authentic facts is more demanded, or on which they are more likely to throw light, or, indeed, on which light is more required, than that of tumors. We are not deficient in valuable information respecting them—their classification by Abernethy, and their treatment by others. But we want to go further than they have gone; to advance the outposts; to develope and gain possession of points, which would give more clearness to what is now obscure, more certainty to what is now uncertain.

I am of Mr. Liston's opinion, that the difference in the nature and structure of tumors is generally owing to their location, and connection with textures or tissues from which they have their origin. They seem to be made up of depositions from the changed actions of the nutritive vessels of the part in which they are located. Inflammation is, probably, the agent or action which commences the process. This action produces a deposit of lymph, or fibrin, or both; after this subsides, the vessels do not regain their former condition and healthy action. Infiltration, or growth, advances; and this assumes a texture similar to the tissue from which it has its origin. This deposition becomes organized; and the same, or new vessels, secrete a substance similar to itself, and the growth enlarges. As it advances, it may lose by morbid action its resemblance to the primary tissue from which it proceeded. Its structure may change and assume a different action, and independent of the tissue connected with, or surrounding it; and it may degenerate into a growth of a more complex and injurious nature. There are others, again, which from their locality, and assuming this new mode of action, change in structure and character steadily for the worse, and finally assume a malignant action. Temperaments and constitutional conditions, too, have much agency in developing the character and progress of tumors.

The following cases have recently passed under my inspection and treatment.

Case I.—Mrs. B——n, aged 29, small and delicate form, came to Watertown for my opinion and advice, on the 12th inst. She had a targe tumor situated over the liver. It made its appearance about two years since, in the form of a small, hard, moveable body, near the cartilaginous extremity of the false ribs, and near the oblique fibres of the lateral portion of the diaphragm, covered deeply by the integuments, and evidently attached to the diaphragm, as it impeded respiration when moved or pressed upon. It now extended downwards about seven inches, towards the spine of the ileum, its outer surface covered by the abdominal muscles, and its inner one by the peritoneal membrane. For a few months past, it had pressed so much upon the liver, as to derange the functions of that organ; there were occasional pains extending to the right shoulder, with a sallow or jaundiced countenance.

The tumor projected but little anteriorly; could be raised and brought forwards, by pressing the fingers from each side beneath, so that it could be distinctly separated from the liver. The integuments and tissues covering it were of healthy appearance; no irregularities of surface. The portion which made up its attachment or origin, appeared hard like a ligament. Pain was experienced at this point on standing erect, or from pressure of clothes.

It had become a case of unusual interest to the faculty in the section of country where she resided. There was some difference of opinion as to its nature. There was a uniform opinion that it was a distinct growth, but so much connected with the diaphragm and peritoneal lining, that its removal by an operation was not justifiable. No treatment had been employed.

After investigating and examining the case, I decided in favor of the practicability of removing the tumor, and she readily submitted to the operation.

She was placed on a settee, with her right side exposed. An incision was commenced over the upper portion of the tumor, and carried six inches to the lower portion. The integuments and muscles were divided the whole length of the incision, and the tumor exposed its whole length. I dissected the divided parts from the tumor laterally, and liberated the lower portion from the peritoneal lining to which it was attached. An assistant raised the tumor from this point with a firm hook, so that I readily dissected it from its attachments to the muscles anteriorly and the peritoneal lining posteriorly, to its origin. On taking hold of the tumor, it proved to be attached to the peritoneal and cartilaginous portion of the rib, and outer portion of the diaphragm. A few strokes of the knife separated it from these attachments. Arterial bleeding followed from this point, from three vessels, which required ligatures.

The operation occupied about four minutes, and was borne with much firmness by the patient. The wound was united by suture in the centre, and dressed with adhesive straps, compress and bandage, and the patient placed in a recumbent posture for the first three days. Pain was produced in attempting to turn or move, with constant pain in the right side of the thorax and shoulder for four days. After this, these symptoms subsided, and the patient walked her room and occasionally occupied a rocking chair for exercise.

In fourteen days, the ligatures all off, the wound well closed by the first intention, and she left me to perform a journey home of 30 miles in a carriage. The tumor was six and a half inches in length, and eight and a half in circumference, of a fibrous texture.

Case II.—Miss N., aged 20, healthy, delicate, and well formed, was addressed by a young gentleman, and a mutual attachment induced him to propose marriage. Time was taken by the lady to make a definite answer. She immediately informed a sister with whom she lived, that from a delicacy she had concealed, for several years, a serious difficulty which had been progressing during this time; that a large growth, or tumor, filled the vagina, and protruded out some distance. The attending physician of the family was called, and, on examination, found a large tumor distending the vagina and protruding some inches from it, with a neck and attachment on the left side a little below the cervix of the uterus.

A consultation was desired, and on making an examination, I found a large tumor as described. It never had given the patient much pain or uneasiness. It had become burthensome by its weight and pressure on the soft parts, and its protrusion. Its surface was smooth, and the whole tumor was solid, much like a healthy kidney to the feel. The patient was willing to submit to any operation I should advise.

She was placed upon a bed, her legs flexed upon the body. I succeeded, with my hand, in bringing the tumor down and out, so as to expose its attachment; which was on the left side of the vagina, from the superior wall of the inner surface, or transverse rugæ of the vagina, near the cervix uteri; its base about an inch and a half in diameter, with a neck of the same size. I made a circular incision deep into the sub-mucous cellular tissue from which the growth seemed to be developed, and dissected off a fibrous tumor, seven and a half inches in length and eight in circumference. But little bleeding followed. A T bandage and compress wet with spirits and water over the external parts. The patient recovered in a few weeks, gave an answer to her suitor that she would marry him, and she has since exhibited full demonstration of a perfect recovery, by the recent birth of a son.

The tumor was cellulo-fibrous in its structure, and similar in appearance to the fibrous structure of the uterus.

Case III.—I was recently consulted by a gentleman on account of a difficulty that attended his daughter. This, again, was a case of much interest and delicacy, from the girl's being at the age of 19, and her beauty and accomplishments had induced a young man to make her a proposal of marriage. She had been attended with a local affection for two years, which was an insurmountable objection to marrying. Not willing to refuse the offer entirely, and unable to conceal her actual situation longer, she disclosed her difficulties to her mother, and they, with the father, came to me for advice.

On inquiry, I found she complained of having a tumor situated between the rectum and the floor of the vagina, which had been enlarging for the last two years. On making an examination, I found her statement to be true; that the growth occupied a space between the anterior surface of the rectum and the posterior surface of the vagina, originating here, and distending the two mentioned surfaces, pressing against and nearly filling up the lower portion of the vagina and inferior and terminal portion of the rectum. The nature of the enlargement, and its location, were easily ascertained by passing a finger into the rectum and vagina. She had suffered but little, except from pain occasionally on going to stool, and constipation of the bowels. On pressing upon the tumor from the vagina and the rectum, it could be raised, and made to elevate the vulva of the left side.

I advised an operation for the removal of the tumor. She was placed on a bed, with the legs flexed and knees separated. I pressed the tumor forward with my first two fingers of the left hand in the vagina, and the thumb on the labium. I made an incision in the direction of this organ, about three inches over its base, and exposed the anterior surface of the tumor. By lateral dissections with the knife and my finger, I succeeded in removing it, without injuring the rectum or vagina. Its attachments were firm, and their separation made principally with the finger and handle of the scalpel; but little bleeding followed. The tumor, when removed, was four inches in length, and two and a half in diameter, of a hard, fibrous texture. Dressed with the T bandage and compresses wet with spirits and water, and kept her in a recumbent posture for eight days. After this, she walked her room, and in sixteen days from the operation, she left in a carriage for home, sixty miles. She has since entirely recovered, and was happy in being able to say yes to the question proposed, and fitted to be united in marriage and to consummate what had been for some time in doubtful suspense.

All these tumors originated from membranous tissues. They were very dense, and were made up of minute fibrous ramifications; irregular in some portions, and in others radiating from the centre, surrounded by a cellular covering to which they adhered firmly.

The first case was probably caused by a lesion produced by lifting. For the second I could not assign any exciting cause. The third was probably from an injury produced by riding on horseback.

Watertown, N. Y., Oct. 29, 1844.

INFANTILE FEVER.

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—I submit to your disposal my theory and treatment of a disease, *always dangerous*, and one constantly occurring in the practice of every physician. Yours, &c. John P. Leonard.

Lime Rock, R. I., Oct. 29th, 1844.

The disease about to be described is the *arachnitis* or *hydrocephalus* of some authors, and the *apoplexia serosa* of others. It has also borne other appellations; but, so far as I recollect, they are only the synonyms of those I have just mentioned.

Either of the above names conveys but an indefinite idea of the disorder; hence, I have rejected them, and substituted one that appears to me more expressive of the nature of the complaint. The disease being peculiar to infants and the very young; likewise a pyrexia of the inflammatory kind, the remote parts receiving the first impressions, while those within the cranium are affected lastly, constituting hydrocephalus, which is a *consequence* rather than a *symptom* of the primary inflammation, are sufficient reasons for discarding those vague titles, and sufficient, too, for our adopting a name more direct in its representation of the malady—viz., *infantile fever*.

Infantile fever for the most part is confined to the first two or three years of life; few older than five years suffer from it, *fewer* over ten years of age, and perhaps none at so late a period as ten; for approximation towards youth throws off the liability to the disease, as the experience of all practical men shows.

Its approach is commonly slow and insidious, and the disease may be thoroughly fixed before the nurse is fully aware that the child is "unwell." Could the little patient tell his feelings now, he would complain of lassitude, languor, rigors, and of all the premonitories of continued fever. Soon the surface of the body is found hot and dry, the pulse increases in strength and fulness, nausea and vomiting now attend, accompanied with constipation of the bowels, the dejections being pale and ropy, or there is diarrhœa with green watery stools. Often, however, the disease comes on suddenly, and all its symptoms are developed in their worst form in a short time, making their invasions rapidly on the constitution of the patient.

During the next stage of the fever, all of the above symptoms are sensibly aggravated, unless subdued by medical means; and in addition to them, stupor, palpitation, convulsions and interrupted respiration. Now we may notice dilatation of the pupil, dimness of the eye, grinding of the teeth, deep sighing, tossing from side to side, intolerance of light and sound; and here we always find a very quick and laboring pulse, manifesting to us that the circulating system is greatly disturbed.

The next and last stage may with much propriety be termed hydrocephalus; for if the fever proceeds to this point, water does accumulate within the cranial vault. Now the pulse falls to a feeble standard, or may be very slow and corded; it not unusually becomes intermitting.

In those cases that prove fatal, strabismus, lethargy, paralysis of the hemiplegic kind, and apoplectic stertor, supervene. When effusion does take place, the fury of the disease subsides, which leads the inexperienced to hope that convalescence may be soon looked for; but this truce is soon broken, and the little sufferer is relieved by death from its sufferings. Recovery does, however, take place occasionally after the effusion of serum within the cranium, and we may assist nature in her restorative process even in this late stage of the disorder.

Causes.—Its proximate cause is inflammation, not of the brain first, but of other and remote parts, as anatomical appearances show. Many deny that hydrocephalus is an idopathic dropsy, yet they overlook the fact when they speak of its treatment. Dr. Gregory says the distinction between frenzy and water in the head is acknowledged by sound pathology; yet he, like others, in his treatise on the subject, confounds the symptoms of the first with the last, and instructs us to treat frenzy and hydrocephalus in children as one disorder. Some of the more remote causes are—hereditary predisposition, a scrofulous diathesis, too stimulating diet, drastic purgatives, worms, teething, suppressed eruptions, epidemic influence, and *the peculiar condition of infancy.*

Pathology.—Dr. Cheyne says inflammation of the intestines is always present, and the liver often adherent to the neighboring parts by organized lymph. The liver is often found enlarged; and these structural derangements explain how those functional alterations which this organ undergoes in the progress of the fever, may be accounted for upon sound principles. Inflammation of the mucous membrane of the alimentary canal is as frequent as cerebral disorganization. "In sixteen cases dissected by Dr. Blockhausen, the mucous coat of the stomach was softened in all, and the internal surface of the intestines studded with diseased follicles, from which pus escaped." Eleven cases of hydrocephalus, examined after death by Dr. A. T. Thomson, all showed traces of inflammation of the abdominal viscera.

As the stomach, bowels and liver are first disturbed, we must conclude that inflammation is first established here, constituting what I have styled infantile fever; but when the brain comes to sympathize with the other parts, it also becomes disorganized and oppressed by water, as dissections prove. Water or serum is found within the cranium, where the patient lives to pass through the third stage of the disease. Its location is about those regions that have previously been inflamed—sometimes the effused serum lies on the outer surface of the pia mater. This membrane is said to exhibit morbid appearances more frequently than either of the others. The dura mater does not often show signs of previous inflammation, indeed not so uniformly as the arachnoid; yet they are all more or less inflamed, and their vessels injected with blood. The substance of the brain is softer than natural, and it is of a paler tint. The color of the fluid differs in individuals.

Diagnŏsis.—The symptoms, related with the fact that the disease is peculiar to infantile age, teach us to distinguish it from other disorders. It may be compounded with infantile remittent fever, but the circumstance that the remissions of the latter are more perfect than the former will instruct us to mark it—its exacerbations occur at given periods, while in infantile fever they are exceedingly irregular.

Prognosis.—Some have pronounced the disease uniformly fatal; others have spoken more favorably. Those who discourage us most, consider hydrocephalus as an idiopathic dropsy, or rather an idiopathic disease; and those who inspire us with confidence contend that dropsy in the head is not an idiopathic dropsy, unless it may be called so when it is congenital.

I have said that the disease is always dangerous; yet the majority of cases will recover if judicious treatment be seasonably employed. But if nothing be done till there is effusion upon the brain or its membranes, medicine will do but little towards effecting a cure. The favorable symptoms are a mitigation of the fever, a better condition of the stomach and bowels, with improved secretions. The unfavorable are insensibility of the patient, strabismus, blindness, irritable pulse, &c. &c.

Treatment.—General bloodletting is commonly indicated at the commencement of the fever, especially if the child is robust and has been previously healthy. Bleeding till syncope is induced will subdue the inflammation, or, at least, cut short the disease if done at the onset. I am so much in favor of bloodletting in this disorder, that I lay it down as a rule never to omit it during the first stages if the patient is even very young, and I appeal to the pathology of the complaint to support this doctrine, which many oppose and few adopt. Can an inflammation of the stomach and intestines be subdued in any other way so successfully (and I might say certainly), as by the lancet? In the advanced stages we must lay aside the lancet, and be cautious in the use of leeches and cupping. Leeches on the temporal regions, or opening the artery if great inflammation of the head has arisen before the patient is too weak to lose a little more blood, is to be trusted, rather than any other remedy. Leeches over the bowels are of much service from the first till the second stage of the disease is past.

An emetic at first will be found serviceable. Ipecacuanha I prefer, being milder and safer in its operation than the generality of such medicines. After the stomach has rejected its contents, should nausea and vomiting persist, a mustard cataplasm may be laid over the stomach and a weak solution of bicarb. sod. given every four hours, alternated with small doses of protochlo. hydr. till the latter produces catharsis. To expedite the effect of the calomel, an enema of olive oil and table salt may be administered *secundum artem.* Sinapisms and warm pediluvia are useful, and may be assisted in their derivative office by brisk friction on the extremities.

Cathartics, when there is constipation, will unload the viscera and impart to the bowels new and natural action. Mild medicines of the laxative kind will do good by sweeping off the morbid secretions in those cases where diarrhœa is present. But there is so much irritation and inflammation of the bowels that drastic purgatives are inadmissible; in fact, *they will always prove hurtful,* notwithstanding they are so much lauded by writers on hydrocephalus. It will be sufficient to keep the bowels open so that the patient may have one or two evacuations daily. The following are good medicines for this purpose. R. Protochlo. hy. gr. ii.; Sir. rhei., f ʒ j. M. and give to a child one year old for a dose. Or sulph. mag. *per se* in moderate quantities. Castor oil is also a valuable aperient.

When the disease runs into hydrocephalus, those agents styled hydragogue cathartics are demanded. At this time the inflammation has left the stomach and bowels, having attacked the head, therefore my objection to active medicines does not apply to this stage of the disorder; here they will act as counter-irritants, thereby favoring the brain and its appendages. As the functions of the liver are often deranged, and as there is not infrequently organic disease of this viscus, mercurials cannot with safety be left out of the treatment. Diaphoretics and diuretics combined are useful in all stages of the complaint; but their administration must be regulated and suited to particular cases and individuals. Nitre, squills and calomel, are the best. Antimonials are ill adapted to the first stages of infantile fever, on account of the inflamed condition of the alimentary canal; we had better rely on diluents than have recourse to such irritating drugs.

After bloodletting and evacuating the stomach and bowels, blistering and counter-irritation are next demanded. The extremities and bowels should be extensively blistered, and discharges kept up from the vesicated surfaces for several days. If there has been any repelled eruptions, a small blister behind each ear will be of advantage. If vomiting still continues, a blister over the stomach I have thought very beneficial in allaying it. If there is extreme torpor and lethargy, we should be still more profuse in vesicating. The head ought not to be blistered (unless in the instance just given where some eruption has receded), during the inflammatory stage; but in hydrocephalus let the head be shaved and blistered thoroughly.

Antispasmodics, opiates and stimulants, though advised by some, are, in my opinion, injudicious, and should not be allowed in cases of this kind.

For the expulsion of worms, such anthelmintics should be selected as appear best adapted to the patient's condition. Those vermifuges possessed of narcotic or stimulant properties will do more hurt than good. Six grains of protoch. hy., followed by a dose of Epsom salts, will generally be efficient for this design.

The diet during the fever should consist of gruel, rice and gum-water; and nothing like food should be given to the patient till the disorder is removed. We may allow green tea, sage tea, cold water, and any simple drink that the child may crave. These act as diluents, and are sometimes to be preferred to more active medicine.

The patient will need constant attention during convalescence. The disease is liable to recur; therefore all its proximate causes must, if possible, be shunned. Let the diet be plain and simple; keep open the bowels by means of aperient medicines; keep the head cool from the commencement till perfect health is established, and let the patient have the advantage of pure air. Tonics may be given should the vigor of the constitution be tardy in its return.

THE OPERATION FOR CATARACT.

By E. H. Dixon, M.D., New York.

[Communicated for the Boston Medical and Surgical Journal.—Continued from page 222.]

If there were no other reasons for the discontinuance of the absurd operation of reclination, as it is called, or depression of the cataract from its upper circumference downward and backward, the destruction of so large a portion of the vitreous humor would be sufficient to condemn it in the mind of every good surgeon. But this is only the commencement of the real difficulty, viz., the injury of the retina. I have actually heard, and I doubt not many of your readers have also, the direction from the professor's chair, to "bury it deep in the vitreous humor"—the distance it was to be carried by the needle being absolutely indefinite, the only care was to be taken to have it deep enough to be "completely out of the axis of vision." The other method of depression, viz., placing the needle in front of the cataract and carrying it downward and backward (though the only advisable method of displacing the cataract), is liable to the same objection, from the fact of its being carried often directly downward, thereby breaking loose the retina from its connections with the choroid, and again carrying it as in reclination too far backward—thus effecting the same mischief in another place.

Let us consider how extremely nice a calculation, and consequently how steady a hand, is necessary in this latter operation—premising that any injury, however slight, to the retina, will, nineteen times out of twenty, be followed by excessive vomiting, and loss of vision from amaurosis, the latter hopeless, of course. What space have we to work in, so as to avoid injury to the retina? The entire antero-posterior diameter of the globe, from the cornea to the exterior of the sclerotic coat, does not average over eleven lines; three lines of this are occupied by the anterior and posterior chamber, before we come to the cataract. Now the lens itself—called by anatomists two lines in its antero-posterior diameter (the average of those I have measured makes it nearer three)—is often, when opaque, and especially in caseous cataracts, much increased in size. Three lines will be its minimum. Then there are but five lines of space behind the posterior part of the cataract, before you reach the part of the retina most indispensable to vision; we have this space only for reclination. But the lens, even when in a natural state, is four lines in its vertical diameter, and there are but five lines of space left us to act in, even in its broadest part, and this rapidly decreases the moment the cataract is carried beyond the axis of vision. Then it would seem, by actual admeasurement, that there is but one line to spare when in reclination the upper edge of the cataract passes beyond the pupil. What a trifling space for a heavy or tremulous hand, or an incorrect eye in the surgeon! One line only to be passed, before the retina may be unavoidably and permanently injured, and the patient's hope of vision forever destroyed—for there is no further help for an eye thus situated; and very often the sympathetic irritation is communicated to the other eye, and the patient is irremediably blinded.

So far we have only spoken of the retina, because it was the most contiguous to danger. Yet immediately behind this is the choroid—the great vascular tunic of the globe. This I have often seen injured; and I need not say that in such cases most violent and unmanageable inflammation, with total loss of vision, is the consequence.

In my next I will illustrate, by a diagram, the cautions I have given.

WATER IN LARGE TOWNS.

[THE commissioners who were appointed last year in England to inquire into the state of large towns and populous districts, have made their first report, a synopsis of which is contained in the last No. of the British and Foreign Medical Review. We select that portion of the synopsis which refers to the important subject of *water*.]

Water.—The evidence of Dr. Clark, professor of chemistry in Marischal College, Aberdeen, is first detailed. Dr. Clark distinguishes the whole saline contents of water as the neutral and the alkaline. The latter consist entirely of bicarbonates—those of lime and magnesia, and of potash and soda; the former of neutral salts of earths and alkalies. The earthy salts are, of course, the cause of hardness, but Dr. Clark has had occasion to observe that carbonic acid, in excess, renders water hard. Exposure to the air softens it, and boiling, too; but this does not effect the water that is hard from neutral earthy salts. The hardness and softness have important pecuniary relations. The wear and tear of linen is much greater when washed in hard water, and, of course the cost of soap is greater. Dr. Clark has invented and patented a method of testing the hardness of water in ten minutes. He adopts a graduated scale, in which the hardness, caused by one grain of chalk to a gallon, is expressed by one degree. He examined some of the London water; the result of his inquiry was that the hardness differed according to the state of the weather. In May, 1841, the water of the Thames at Mortlake was 14.4°; of the New River, 13.2°; of the East London Company's water, 16.1°. In August the proportion of earthy salts was less, the degrees being 11.8°, 12.0°, and 14.1° respectively. Dr. Clark distinguishes between neutrally and alkalinely hard waters. Thus, the East London water being 16.1° of hardness, is of alkalinity 15.6°, that is, it requires as much acid to neutralize its alkalinity as 15.6 grains of chalk per gallon would require. The Thames and New River stand generally at 12° hardness and 11° alkalinity; while that of Manchester is 12° hardness and 7° alkalinity. The degrees of alkalinity express the degrees in which the water is softened by boiling. The well waters of the metropolis are much harder than that of the Thames. Torrington-square well stood at 80° of hardness; that at the gate of University College at 32°; the water from Red Lion-square pump indicates 61.5°. The artesian wells are much softer. Those at Apothecaries' Hall, at Combe's, and at Truman & Co.'s (breweries), were each about 5.5°. These last are decidedly alkaline, even to the taste when boiled: they are, in fact, solutions of carbonates of soda or potash. Dr. Clark describes his process of purifying water from bicarbonate of lime by the addition of lime water. He estimates the whole amount that might be thus precipitated from the water supplied to the metropolis by the water companies at 9000 tons per annum. The water thus purified falls to 4.2° of hardness, and acquires the same softness as if one part of the original water were mixed with three of distilled water. One hundred imperial gallons of the purified and unpurified water would require the following proportions of soap to form a lather.

	Unpurified.	Purified.
East London - - - - -	31 oz.	10 oz.
Thames - - - - -	28 "	10 "
New River - - - - -	26 "	9 "
Gade, near Watford - - -	36 "	9 "

Dr. Clark estimates the annual value of soap consumed per head in London at 6*s.* 8*d.* The total value, including carbonate of soda, is £630,000, so that the difference of cost, between the supply of hard and soft water, in the matter of soap, may be estimated for London at £200,000 per annum.

Organic Remains in Water. Dr. Clark states (no doubt correctly), that the organic matter which passes into the water from the sewers is not separable by filtration. He is of opinion that undue weight has been given to its presence, and that it is assuming far too much to say that such animal matter as passes into the river remains there unchanged, especially when it is remembered how freely a river is exposed to the action of the air, and that there are other substances present, as the alkalies, so well adapted in such circumstances to increase chemical action. Professor Brande frequently found the *well* water of London contaminated by organic matter and ammoniacal salts; and this appears to be the case in other towns, as in York, for example, in the neighborhood of churchyards. Dr. Clark found animalculæ to abound in the water of all the London companies. His attention was accidentally directed to them, and he counted, with the naked eye, no fewer than fifteen monoculi in a quarter of a pint. The impure water supplied to London is indirectly the cause of drunkenness, by exciting disgust for the pure element, and a taste for fermented drinks.

Filtration of Water.—A great variety of information under this head is accumulated in the report. Dr. Clark describes two principal modes, the one being performed by the natural filter, the other by the Lancashire filter. The first was applied on an extensive scale at Glasgow; a few miles above which city, on the bank of the Clyde, there is a very extensive convex round bank of sand used for the purpose. The Lancashire filter is the common one, with sand and gravel. Mr. Thom describes the self-cleaning filters, erected by him at Greenock, Paisley and Ayr, which differ very considerably from the Lancashire. Over the puddled bottom of the filter a hollow floor, made of perforated tiles, is laid. Upon these are placed six successive layers of gravel, each an inch in thickness, and increasing in fineness upwards, the last being, in fact, coarse sand. Over this there is laid very fine sand to the depth of two feet, about six or eight inches at the top being mixed with mineral charcoal roughly powdered. Colored drawings and sections are given in detail. Mr. Thom, having discovered that moss water was rendered pure and colorless by flowing over or through a particular species of lava or trap-rock (amygdaloid), was induced to substitute this rock for the animal charcoal, which he did with complete success. In an essay inserted in the appendix, Mr. Sloper argues strongly against the utility of animal charcoal, while he recommends Maurras's system.

Supply of Water to Towns.—From the varied evidence of civil engineers, there appears no reason to doubt the easy practicability of supplying every house with an abundance of water at a cheap rate. In the first place, water may be kept night and day, in the pipes, in every house, at high pressure, so that no cistern would be required either for domestic purposes or water-closets ; nor would there be any need for a fire engine. At Greenock, Paisley, Ayr, Nottingham, Preston, New York and Philadelphia, the mains being always full and at high pressure, nothing more is requisite for the extinction of a fire, than to put the hose of a fire-engine on one of the fire-plugs, which are attached to the pipes at short distances along all the streets. The water is then projected at once over the highest house. In New York, the fire insurance is 25 per cent. lower, and in Philadelphia the risk is reduced in the proportion of one to three, since the old system was abandoned. In Preston, the owners of mills are introducing water into every story, a plug and hose being placed in each. The watchman can manage the hose quite well, and the mill owners are now so confident of the success of the plan, that they do not insure the building. In Philadelphia, the servants wash the streets and fronts of the houses by hose attached to the plugs. There can be no doubt that with a proper system of hydraulics, the whole of the refuse from the houses and streets might be washed away at very little comparative cost, or in fact with a profit, if the system of irrigation with the sewage be adopted. The desolating effects resulting from a deficient supply of water for the purpose of cleansing, as depicted by Dr. Arnott, Dr. S. Smith, and others, are strongly in contrast with the statements of Mr. Ashton, a manufacturer of Hyde, who having about 320 houses there, supplied every dwelling with water. The morals and domestic comforts of the people immediately improved.

UNION BY THE FIRST INTENTION—TREATMENT AFTER OPERATIONS

By D. B. Bullen, M.D., of the Cork North Infirmary.

In dressing and treating stumps with a view to obtaining union by the first intention, the great object is to avert inflammation. When inflammatory action sets in, and the parts become painful, hot, and swollen, union does not take place, and if adhesion has taken place during the first two or three days subsequent to the operation, as soon as the parts become inflamed the adhesions break up and the stump becomes a large suppurating sore. The chief aim, therefore, in making up a limb after amputation is to remove every source of irritation, and to guard against any circumstance likely to interfere with the quiet process of reparation. To effect this, after the bleeding has entirely ceased, and the parts have been brought into contact, a sufficient and well-regulated support must be given to the stump to prevent the tendency to sudden and convulsive startings, which cause great suffering, and sometimes burst open the newly-formed adhesions. Some surgeons are favorable to the use of sutures for keeping the edges of the wound together, while others think that they act as causes of irritation, and give rise to suppuration. It is not well to depend upon sutures alone when extensive surfaces are to be held in position, but a few, judiciously placed, give great steadiness and prevent the opposite faces of the stump from gaping when it is placed upon the pillow. Besides the sutures some adhesive straps should be applied, but the whole surface of the stump should not be bound down by bands of sticking-plaster. The continued constriction of adhesive plaster too freely and carelessly put on, causes a great deal of pain, and in amputations below the knee, and of the forearm especially, by compressing the integuments against the surfaces of the divided bones, brings on ulceration of the covering of the stump and protrusion of the bones—a strip of lint over the face of the stump and a light bandage are all that is requisite. From the time the patient is placed in bed the dressing should be kept wet by the continuous irrigation of cold water over the limb. This is very soothing and keeps in check the tendency to increased vascular action ; besides, by keeping the dressings constantly moist, when the time comes for changing them, which should not be before the sixth day, unless the smell of the wound should have become offensive, they can be easily removed without tearing asunder the slight and newly-formed adhesions.

Although it is the general practice of British surgeons, in the treatment of all incised wounds, to bring the edges of the wound together, so that they may unite by the first intention, yet some cases occasionally present themselves which require a different mode of proceeding. In operating upon old subjects, in which the lower extremity has been for a long time the seat of chronic inflammation, we sometimes find the veins of the leg enormously enlarged and varicose, and the arteries few and much diminished in size. When the limb is removed, the venous hemorrhage is profuse and difficult to check. The tourniquet, by causing venous congestion, increases the flowing of blood, and even the compression of a bandage brings on a recurrence of venous bleeding for hours after the operation. On carefully examining the condition of the limb, the muscles are found to be purple, soft, and do not retract, and the integuments are flabby, and inclined to a bluish color. There is a manifest atony in the parts, a deficiency of the vital energy, which is requisite to set up and carry on the reparative action, by means of which a sound union can be effected. From the moment of operating the torpid and relaxed state of the blood-vessels demands stimulation. The first object is to arrest the hæmorrhage; for that purpose the tourniquet, and whatever may cause pressure upon the limb, should be immediately removed, the thigh bent upon the pelvis, so that the stump may be thrown up, and kept in a perpendicular position, and a stream of cold water should be poured from a height over the face of the stump. These means generally check the more profuse discharge of blood, but a venous oozing continues, which is increased by closing up the wound, and putting on a bandage. Should they fail, however, dossils of lint, dipped in a hot saturated solution of alum, applied to the bleeding surface, and leaving the limb exposed in a current of cool air, will generally succeed. It is useless to attempt to obtain union by the first intention in cases of this description; for, if after some hours, when the danger of hæmorrhage has ceased, the edges of the wound are brought together, and the usual dressings applied, it generally happens that at the end of three or four days the stump becomes gangrenous. Gangrene following amputation, in old and enfeebled constitutions, is generally fatal, and we should, therefore, endeavor to avert it by the immediate use of proper local stimulants, and by sustaining the constitutional powers with an invigorating course of treatment. Pressing the surface of the stump with pledgets of lint, dipped in warm elemi ointment and turpentive, soon excites healthy suppuration, and an abundant growth of florid granulations, together with the steady use of opium, carbonate of ammonia, wine and nutritious broths.

The successful result of amputations, like most other surgical operations, depends more upon the medical management afterwards than upon any mechanical dexterity in their performance. The pain and excitement of the operation, accompanied by the sudden loss of blood, is followed by a degree of constitutional disturbance, which is more dangerous to persons who have been heretofore healthy than to those who have long suffered under some painful disorder, and who have been suddenly relieved from a previous source of irritation. Hence primary amputations, performed immediately after recent injuries, are more often fatal than the removal of limbs for chronic and long-continued local diseases. But secondary amputations, in cases of extensive injuries, are more fatal than primary, because they are generally done during the existence of irritative fever, and when the powers of the system have been impaired by the shock consequent upon the injury. The hectic fever which results from suppuration in joints, or from diseased bones, does not contra-indicate operation; on the contrary, upon the removal of the cause of the constitutional irritation, the return to health is often surprisingly rapid. But in determining the propriety of amputating in the secondary stage of extensive injuries, we must be guided by the extent to which inflammation has spread along the limb and disorganized the tissues, and by the nature and degree of the irritative fever. There are two dangers to be apprehended and guarded against after operation. The failure or loss of constitutional power to bear up against the shock, and the re-action consequent upon rallying, which may lead to a state of dangerous excitement, ending in active inflammation. Immediately after the patient has been placed in bed, a large opiate should be given and repeated in proper doses at regular intervals. And here it may be observed, that where the stimulating and cordial influence of opium is required, laudanum and crude opium are the forms most to be relied on. Some of the salts of morphia, and particularly the acetate, when given in large doses, produce so much depression and collapse that it is hazardous to give them in cases where we have to contend with symptoms of great exhaustion. When re-action has fairly set in, the tongue become foul and dry, skin hot, and pulse quick, we must then deal with the case as one of irritative fever. A mild mercurial given at bed-time, followed by an aperient draught in the morning, and the regulated exhibition of some opiate, combined with tartarized antimony, as the circumstances may require. The diet, for the first few days, should be nutritious though not stimulating, and unless there be strong reasons to the contrary, more generous aliment should be given early, for after severe losses of blood withholding animal food often induces an irritability of the system which disposes strongly to inflammatory action.—*London Lancet.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, NOVEMBER 13, 1844.

School Hours in Boston.—With all the improvements which have been introduced into the public schools of Boston, there is one essential element in juvenile education unaccountably neglected, which requires the profound consideration of the committee. Both the instructers and children are worked too hard. There should be a remodelling, in order that the system of free schools, in this enlightened and liberal city, may meet the high expectations of parents, and those who are laboring to perfect the organization of these intellectual nurseries. In the Latin School, particularly, if there were but one session a day, instead of two—and that prolonged to 3 o'clock, with suitable recesses—both the masters and boys would be gainers. The very character of the studies, in that institution, requires a constant and untiring mental effort, from Monday morning till Saturday night. The two half days of rest, Wednesday and Saturday, do not afford that time for re-action of the mind, and physical exertion of the body, which so many hours of fixed, abstract study, require for the preservation of health. Under the present arrangement, the children, mostly young lads, are obliged, immediately on reaching home, to bow down over their books without cessation a considerable time, in order to meet the requirements of the master the following morning. All the study is not accomplished in the school-room, nor in school hours. This brings too much labor upon them in a given period. While the brain is stimulated, and in fact over-exerted, the body is quite neglected.

Now what is the result of this forcing, hot-house method of instruction? Simply this—many of the children, being thus cheated out of that generous amount of muscular activity in the open air, which all young animals covet and require, and which was contemplated by the great Author of their existence, in the establishment of certain organic laws, are pale, and their bodily frames poorly developed. The teachers, also, are far from being robust, and as vigorous as they should be to withstand the deteriorated atmosphere of full apartments year in and year out, however well they may be ventilated. They are frequently broken down in health, and, whenever they can enter upon other pursuits, invariably make their escape.

If, under this view of the subject, which those at all acquainted with the operation of the system will admit, to some extent at least, to be correct, the Latin School had but one session daily, immense benefit would be obtained by the change. It would be a gain of health—inasmuch as it would afford a daily relaxation for body and mind, alike conducive to present comfort, and to the well-being of the individual in manhood and old age.

But if no such modification can be brought about, then allow the scholars, with the instructers, those drudges of civilization, who actually mould the character of a nation, longer vacations. Every public instructer in Boston labors more hours, and harder, than he should. Nothing is gained by it for the public; there is no economy in taxing men beyond their strength. Both vacations should be of longer duration. Surely, if the professors and tutors of colleges are indulged with two annual vacations of six weeks, how much more cogent are the arguments that might be adduced to sustain the just claims of the Boston teachers to an equal modicum of rest.

A hope is entertained that an enlightened public sentiment will ultimately lead to an improvement in the public schools of the city in this respect. It is of vast importance to individuals, to families, and to coming generations, if well-disciplined minds and well-grown bodies are estimated according to their intrinsic value.

Honor of Discovery.—Professor Hitchcock, of Amherst, Mass., has the reputation of having made a discovery of very extraordinary interest to geologists—the fossil foot-steps of birds, in the sandstone, at certain localities on Connecticut river. Within a short period, Dr. James Deane, of Greenfield, Mass., has announced to the public that he was the real discoverer, and that Prof. Hitchcock has appropriated to himself an honor that does not fully belong to him. The last No. of the American Journal of Science has three articles upon this vexatious subject, written by the two scientific combatants, to which those most interested in such matters, are referred. Both gentlemen are to be blamed—the one, for not fully acknowledging, in the first instance, his indebtedness; and the other, when he found himself neglected, for not having the moral courage sooner to assert his rights with boldness. Parties seem to be taking sides in regard to this controversy; hence a long and perhaps tedious warfare of words may follow in different publications. Those who are envious of Mr. Hitchcock's reputation, will doubtless lend a hand, if assistance is wanted, to pull him down. Dr. Deane has a host of friends, it is easy to perceive, who are determined to exert every power within their control, till justice is meted out to him; and all that is placed to his credit, must of course be subtracted from the amount that now stands in the ledger of fame to the credit of another.

Boston Lunatic Asylum.—Last week the annual report of the Medical Superintendent of the city institutions at South Boston, was received. As usual, it is a very satisfactory document, and, to the citizens generally, must be highly interesting, since the whole organization of the establishments to which this pamphlet refers, had its origin in the benevolence of the inhabitants. The lunatic hospital, especially, is a benevolent institution of no ordinary character, since it is made the home of those who were formerly the most abject of sufferers.

Although the hospital was constructed for the accommodation of only 60 patients, 108 have in some way been received. Dr. Stedman shows what is imperiously required—further action in the form of additions to the edifice, to meet the demand that will necessarily be made on him by new applicants. "Health," continues Dr. Stedman, "the past year, has reigned among the inmates; no epidemic or other disease has prevailed here. No accident of any kind has befallen us. No suicidal attempts on life have been made. The diseases which in the few cases have resulted in death, have been such as no art could have arrested and no care could have alleviated." In a catalogue of 137 beneficiaries, Ireland has furnished 53—while no one State in the Union has had over 7.

Whole number of patients under treatment in each house, from June 30th, 1843, to July 1st, 1844, 1272: viz., Lunatic Hospital, 137; House of Correction, 568; House of Industry, 567.

Snake Weed.—Wood, the celebrated author of "New England's Prospect," who visited Boston within a few years after its first settlement, published his observations on the country in 1639. In the eleventh chapter, entitled "*Of the Evils, and such Things as are hurtful in the Plantation,*" he speaks particularly of a remedy for the bite of a rattlesnake, as follows. "When a man is bitten by any of these creatures the poison spreads so suddenly through the veins and so runs to the heart, that in one hour it causeth death, unless he hath the antidote to expel the poison, which is a root called snake weed, which must be champed, the spittle swallowed, and the root applied to the sore; this is present cure against that which would be present death without it; this weed is rank poison if it be taken by any man that is not bitten, unless it be physically compounded. Whoever is bitten by these snakes, his flesh becomes as spotted as a leper, until he is perfectly cured. It is reported that if the party live that is bitten, the snake will die; and if the party die, the snake will live. Five or six men have been bitten by them, which by using the snake weed, were all cured, never any yet losing his life by them. Cows have been bitten, but being cut in divers places and this weed thrust into their flesh, were all cured. I never heard of any beast that was yet lost by any of them, saving one mare."

Is anything now known of the remedy here spoken of with such confidence over two hundred years ago?

Controversy relative to the Cure of Consumption.—A pamphlet of 30 pages is circulating extensively, entitled—"*Reply of Dr. William Mc Dowell to Dr. Yandell's Rejoinder, in a Controversy relative to Consumption,*" which is filled with cases in the practice of Dr. McDowell, illustrative of his views.

In the Oct. No. of the Western Journal of Medicine and Surgery, a remark was introduced by one of the editors—reputed, according to this pamphlet, to have been from Dr. Yandell—that roused the Kentucky blood of Dr. McDowell. He has opened the phials of wrath upon the head of the man whom he accuses of unfairness, in no unstinted measure. Aside from his intellectual vigor, Dr. McDowell almost equals the giants in size, and should he actually put his closing threat in force—wo to his opponent. "A few words now to Prof. Yandell—private," says the excited author. "Should you, sir, condescend to deign me any further notice, be pleased to adhere scrupulously to the truth—even at the expense of some trouble in conning and sifting your allegations. The publication of your falsehoods costs you nothing. I being denied equal facility, am at a heavy expense to follow them up with my refutations. Now, sir, I shall go to no further expense in printing, and if you publish any more of those villainous falsehoods—such, if unrefuted, as would be derogatory either to my moral character or to my professional standing—to save expense in paper, I may be tempted to indite my answer on your parchment"!!

Medical College at Washington.—Through the National Intelligencer, a traveller has furnished some interesting memoranda in regard to the new locality and conveniences possessed by the medical school at the seat of Government, which are transcribed for the sake of spreading abroad such agreeable intelligence. After commenting generally on the progress of the city, the writer goes on to say that the college building is an extensive edifice, immediately north of the City Hall, and he "was pleased to find, on visiting this institution, that its able and enterprising Faculty had been actively occupied during the past summer in arranging and adapting it for the delivery of medical lectures, as well as fitting it up for an extensive infirmary for the accommodation of the sick. It is now admirably suited for both purposes. It contains two very excellent lecture-rooms—one of them, the anatomical, not surpassed in this country for beauty, fitness and convenience—besides extensive and beautiful halls for the museum, laboratory, &c.

"After having carefully examined all the arrangements of the building, I take great pleasure in saying that I know of no similar institution (and I have seen many) more convenient in its plan or better adapted to the different purposes of a medical college; and, in combination with a thorough, practical, and careful course of instruction, such as I understand is furnished by its accomplished Faculty, offers every desirable advantage to the medical student."

Dr. Bell's Medical Bulletin, for October, may be had of Messrs. Jordan, Swift & Wiley, 121 Washington street. Its reports of cases and lectures are not the least of its attractions to the profession.

The Long Issue in the Calvarium.—In the Provincial Medical Journal is detailed by Dr. Oke, the case of a boy suffering from cerebral disease following scarlatina, in which advantage was derived from the long issue made in the calvarium, according to the directions of Dr. Wallis. Consciousness returned by the third day.—*London Medical Times.*

Medical Miscellany.—Smallpox has broken out at Laguayra, and a quarantine has consequently been laid at Porto Cabello on all vessels arriving from that port.—Prof. Liebig, the great chemist, about whom every body is talking in England, is now on a visit at Liverpool.—It is reported that the medical class at Dartmouth College numbers 89—which is very encouraging.—A correspondent says that smallpox has appeared at New Milford, Conn.—No. XVI. of Dr. Dunglison's new edition of the Cyclopædia of Medicine, is published.—Dr. Raymond, of Buffalo, proposes to deliver lectures through the country, on Agricultural Chemistry.—Dr. B. D. Edwards has been removed from the post office, Alton, Illinois.

To Correspondents.—Dr. Hurd's case of Poisoning by Cobalt will be inserted next week.—Various documents from the Medical Department of the National Institute have been received. Most of them appear to be papers of much value, and will be inserted in the Journal as we find room.—Dr. Wallace on Jewish Hygiene has also been received.

Married,—In Boston, Dr. William Hawes to Miss C. A. Curtis.—Dr. Jonathan Mann, of Franklin, Mass., to Miss M. Rollings.

Died,—At sea, on the passage from St. Jago to Philadelphia, Dr. Nathaniel Cheever, of Hallowell, Me., 29.—In Milan, Ohio, Dr. Amos B. Harris, in his 47th year. He was an eminently good man, and his death was serene, peaceful and happy. With his finger on his own pulse, he watched the ebbing of the tide of life with perfect consciousness, and announced to a friend when the pulsations could no longer be distinguished.—At New Albany, Indiana, Dr. Webb, who was dreadfully injured by the explosion of the steamer Lucy Walker.—In Bloomfield, Indiana, Dr. Waldo C. Williams, of Hartland, Vt.—At Brewster, Ms., Dr. Joseph Sampson, 60.

Number of deaths in Boston for the week ending Nov. 9, 40.—Males, 14; Females, 26. Stillborn, 4. Of consumption, 9—teething, 1—dysentery, 1—typhus fever, 3—debility, 1—croup, 2—inflammation of the bowels, 3—sudden, 1—infantile, 1—scarlet fever, 3—child-bed, 2—cholera infantum, 1—erysipelas, 1—inflammation of the lungs, 1—disease of the heart, 1—cancer, 1—marasmus, 2—hæmorrhage, 1—old age, 1—fits, 2.

Under 5 years, 16—between 5 and 20 years, 2—between 20 and 60 years, 18—over 60 years, 4.

REGISTER OF THE WEATHER,

Kept at the State Lunatic Hospital, Worcester, Mass. Lat. 42° 15′ 49″. *Elevation* 483 *ft.*

Oct.	Therm.		Barometer.		Wind.	Oct.	Therm.		Barometer.		Wind.
1	from 36	to 56	from 29.76	to 29.81	N W	17	from 40	to 55	from 29.63	to 29.69	S W
2	29	69	29.74	29.83	S W	18	59	64	29.51	29.59	S E
3	42	58	29.45	29.59	S E	19	54	65	29.09	29.30	N W
4	58	66	28.93	29.18	N W	20	36	45	29.63	29.83	N W
5	46	60	28.95	29.13	N W	21	28	49	29.96	29.98	S E
6	43	57	29.30	29.35	N W	22	40	54	29.83	29.89	N E
7	43	50	29.19	29.40	N W	23	34	57	29.79	29.82	S E
8	42	52	29.46	29.49	N W	24	33	58	29.82	29.83	S E
9	42	68	29.31	29.34	W	25	46	60	29.62	29.75	S W
10	44	71	29.15	29.30	S W	26	50	66	29.44	29.54	S W
11	47	55	29.38	29.49	N E	27	50	52	29.36	29.39	N E
12	38	59	29.65	29.73	N E	28	32	34	29.22	29.29	N E
13	33	63	29.70	29.77	S W	29	38	41	28.89	29.03	N E
14	42	53	29.39	29.56	S W	30	38	41	29.22	29.30	S W
15	52	58	28.71	29.03	S E	31	35	42	29.37	29.48	N W
16	46	59	28.98	29.35	S W						

The month has been a wet one, but otherwise favorable for the business of the season; there were many favorable days in succession towards its close. Much rain has fallen, and the earth is fully replenished for the coming winter. The range of the Thermometer, from 28 to 71; and of the Barometer, from 28.71 to 29.98. Inches of rain, 7.34.

Memphis Hospital.—This is a benevolent institution founded and sustained by the liberality of the State of Tennessee. Its object is the relief of the destitute and afflicted *poor* who reside in its vicinity, or who navigate the Mississippi River. It is a beautiful brick building of three stories, each containing eight rooms; of good dimensions, and admirably arranged. The house is capable of accommodating 200 patients, but on account of the limited fund annually appropriated by the Legislature, there are not often more than fifty within its wards at one time. There are ten acres of ground attached, which is well supplied with wood, under good enclosure, and capable of great improvement. It is situated about one mile from the river, in a beautiful grove, and certainly presents a most inviting asylum to the weary invalid. The sum appropriated for its support during the present year, is $5,000. The Hospital is under the superintendence of a board of Trustees, who employ a resident steward, and two attending physicians. The latter receive, we think, $500 per annum between them, and are required to pay the necessary professional attentions. The present incumbents are Drs. Christian and Watkins, gentlemen of high standing and extensive experience in the diseases of the South. Dr. Christian has been a resident of Memphis about twenty years, and is universally esteemed for his moral worth and professional skill. Dr. Watkins formerly resided in Columbus, Mi., and has only settled in Memphis within a few years past, or since the late extraordinary improvement of the place.

The present building was opened for the admission of patients on the 1st day of November, 1841. From that time, up the 24th August, 1844, the day of our visit, there have been—admitted, 387; discharged, 265; died, 85; remaining, 37. The cases in the house are much the same as are to be met with in the New Orleans Charity Hospital, viz.: intermittent and remittent fever, rheumatism, chronic diarrhœa, ulcers, &c., and the subjects are almost precisely similar, i. e. Irish and other foreigners. Only the most needy applicants are admitted, as the amount of the hospital fund precludes the possibility of receiving all that apply.

We have no doubt the fund is used in the most judicious manner, so as to extend relief to the greatest number, and the most proper objects of charity—and it certainly is creditable to the liberality of the State of Tennessee, to have built a fine hospital and appropriated $5,000 per annum for the relief of a class of people, nine tenths of whom are not her citizens, and pay nothing into her coffers.

Memphis is growing up now to be an important place, and may expect to be well supplied with the vagrant foreign population, which is emigrating to the United States in such immense numbers. For every American citizen who may chance to be destitute, get sick, and request the charities of the Memphis Hospital, there will be at least 50, if not 100 foreigners, who wander about from place to place, and add nothing to the honor or interest of society. Let the Trustees of the Hospital look to this thing in time, and with the spacious grounds belonging to the establishment, have some arrangements made, by which the invalid shall be compelled, as soon as he is convalescent, to make some compensation for the benefit he has received. Some species of labor can easily be adopted, which would give salutary employment to the convalescents, and the proceeds of which would go far towards defraying the expenses of the institution.—*New Orleans Medical Journal.*